Transportation Element

"The paradox of transportation in the late 20th Century is that while it became possible to travel to the moon, it also became impossible, in many cases, to walk across the street."

— Joell Vanderwagen

Vision: Maintain and develop a comprehensive, safe, and efficient transportation system, with an emphasis on promoting viable alternatives to the automobile.

Background & Existing Conditions

Summit County's residents and visitors depend upon a reliable transportation system in order to access recreation, shopping, services, and places of employment. In general, the County's system of roads, along with transit and non-motorized alternatives (e.g., bike paths), provides reliable service. However, as the population and visitation grow in the future, it will be important to continue to provide safe and efficient transportation systems. These transportation systems should at a minimum be maintained at the current level of service. Having an efficient transportation system is critical in order for the County to remain competitive with other communities that rely heavily on tourism.

There are some opportunities for increasing capacity on the County roadways. However, opportunities for construction of new arterials and roadways connecting the County's urban areas are almost non-existent, because of geographic limitations and other factors. In addition, the cost of constructing and maintaining new roadways is tremendous. As a result, we will need to rely more heavily in the future on alternatives to the automobile. There are already time periods when traffic volumes are unacceptable to many residents and visitors. An example is driving through the Town of Breckenridge in the late afternoon on a busy skier weekend. In order to avoid more gridlock and "urban traffic problems" the County will need to be aggressive in providing an array of transportation options to area residents and visitors. A comprehensive approach to transportation needs to be taken, coordinating the various alternative modes into a network that connects residences to commercial and employment areas, recreation, and schools.

Roads

Interstate 70 (I-70) runs east to west, bisecting the County and moving thousands of vehicles on a daily basis through the County. In addition, state highways 6 and 9 provide major movement arterials connecting the communities of Keystone, Dillon, Silverthorne, Frisco, and Breckenridge. County roads such as the Swan Mountain Road and Dillon Dam Road provide additional critical links between the County's urban areas. Other county and town roads serve as collectors providing access to local roads. The mountainous geography of the County precludes most possibilities for alternative routes between major urban areas. Therefore, the existing system of roads will continue to serve as the primary routes in the County. Some opportunities for widening of lanes exist. Hwy 6 was recently expanded to four lanes between Dillon and Summit Cove. Expansion of Hwy 9 to four lanes between Frisco and Breckenridge is currently being evaluated.

Where lane expansions do occur, an analysis of the use of extra lanes as High Occupancy Vehicle (HOV) lanes should be explored. HOV lanes provide a good incentive for people to utilize transit or participate in carpools, as traffic typically is less congested in HOV lanes.

One issue related to roads in the County is character. The width of roadways and other factors (e.g., cut and fill slopes on steep hillsides) can have dramatic impacts on the existing character of the County's

landscapes. This Transportation Element emphasizes designing roadways so that they blend with the natural landscape, as opposed to contrasting with the landscape.

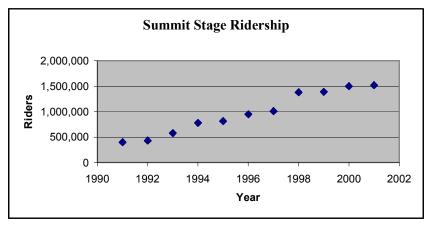
A major player in discussion of highway issues is the Colorado Department of Transportation (CDOT). CDOT is responsible for construction and maintenance of I-70, as well as the County's three state highways (Hwy 6, Hwy 9, and Hwy 91). The construction and maintenance practices used by CDOT have a huge impact on the efficiency and safety of the County's roads and can also have direct impacts on our environment (e.g., noise berms, road sanding and runoff). Future road and highway issues must be carefully coordinated with CDOT.

Transit

The Summit Stage provides free bus service between all major urban areas of the County. Other bus systems are operated by the Town of Breckenridge and the resorts of Keystone, Copper Mountain, and Breckenridge. Utilizing one or a combination of these transit systems, it is possible for persons to travel between the urban areas of the County. Because each of these systems is run independently, there could be a better coordination between the different systems to integrate service and increase efficiencies. Moreover, the local school district has an entire fleet of buses that are generally not in operation on weekends or during part of each weekday. Cooperation with the school district could increase opportunities as well.

Ridership has increased dramatically on these transit systems in the last few years. For example, ridership on the Summit Stage increased almost four-fold in a ten year period (see chart below). However, there is a need to continue to increase ridership as an alternative to increased vehicle trips on our roadways. More effective marketing of the different free transit systems available in the County could help continue to increase ridership. Particularly, this marketing could be helpful in enticing more visitors who are unaware of the service to use it.

Another thing that could be done to increase transit use is to make it more accessible. Increasing accessibility can involve adding different routes in areas currently not served. However, accessibility is also impacted by proximity of bus stops and shelters to residents' and visitors' homes. Sidewalks and pedestrian paths can greatly enhance the opportunities for riders to access transit stops. The development of such amenities should be considered and undertaken in areas that currently are deficient in pedestrian paths and in new development proposals. Pedestrian access by some transit users may be unfeasible given proximity of the nearest transit stop to the user's residence. An additional enhancement for these types of situations could be through the improvement of existing and the development of new park-and-ride facilities, allowing more opportunities for transit users to drive to the bus stop.



Source: Summit Stage.

Other Alternative Modes

Other options are available to help alleviate congestion on local roadways. These options include pedestrian access in commercial business areas and pedestrian opportunities between residential areas or places of employment/commercial areas. Increasing availability of the pedestrian path system is one way to increase pedestrian use. Another method is to promote compact forms of urban development that either mix residential and commercial uses or put residential uses within close proximity of commercial services, places of employment, and public facilities. Another option, exercised by a number of locals particularly in the summer, is use of the County recpath system to commute to work.

Continued enhancements and additions to the recpath system can help increase this seasonal use. In addition, construction of wider shoulders on major County roadways can provide increased opportunities for bicycle use. Bike and pedestrian enhancements also have the benefit of promoting active and healthy lifestyles. The community at large benefits from having healthier residents. There are numerous studies that demonstrate a direct link between active lifestyles and decreased medical expenditures.

Increasing the amount of people in cars can help reduce the number of cars on the road. Thus, the promotion and use of carpools, both locally and from Front Range visitors, can help alleviate transportation issues in the County.

Parking

Parking is a fundamental component in a comprehensive transportation network. Road improvements and increased capacity must be accompanied by the provision of adequate parking in necessary locations. Parking can be in short supply in some County locations at peak periods (e.g., Silverthorne Factory Stores during Christmas season). However, the biggest parking issues are experienced at the ski resorts. On busy weekends and peak season periods, parking for skiers at the resorts can be inadequate to accommodate all vehicles. As a result, parking often spills over onto state highway and County road rights-of-way and other areas where it is not legally allowed, at times resulting in a number of safety and maintenance (e.g., plowing) problems.

Need for parking at the resorts has been exacerbated in recent years as vacant lots that were previously used as parking lots are converted to residential and commercial uses. As future development occurs and this conversion continues, it is critical to maintain the existing number of parking spaces at the resorts (and possibly increase if demand dictates). The resorts (and towns) must continue to work on programs that help alleviate parking congestion problems, such as more efficiently using existing parking spaces, and increasing the use of mass transit and car pooling. A coordinated approach to addressing parking is preferable, as parking decisions made in one area can have an impact on another. For example, if Copper Mountain charged a fee for all its parking, it is likely that there would be dramatic increases in the number of people who park in Frisco and take a bus to the resort. Related to this discussion is a need to provide more park-and-ride opportunities for residents and visitors.

Transportation Planning

Planning for the different components of transportation has been in a piecemeal fashion in the County, usually focusing on one road project or recpath improvement at a time. The Summit Stage is in the process of updating its operating plan, which provides a comprehensive long range look at the Stage's future. However, the Stage is not the only transit provider in the County. CDOT has a six-year plan for road improvements. The County has a 20-year plan for road maintenance. Road improvements (e.g., widening) on County roads are the responsibility of developers or local homeowners. There currently is

no plan that attempts to coordinate the various components of our transportation system or identify when levels of service dictate improvements. This Transportation Element recommends that such a plan should be undertaken.

Goals, Policies/Actions

- Goal A. Develop an integrated and comprehensive transportation network that anticipates the future needs of residents, tourists, and businesses, and which promotes alternatives to automobile use.
- Policy/Action 1. The County, towns, resorts, CDOT, and other appropriate parties should work cooperatively to create a countywide transportation plan that comprehensively address transportation issues in Summit County. At a minimum, the plan should address the following issues:
 - 1.1 Roadway improvements and appropriate funding mechanisms.
 - 1.2 Transit service and development of park and ride facilities.
 - 1.3 An emphasis on increasing bike and pedestrian use and accommodating those uses in new and existing developments.
 - 1.4 Parking strategies that provide adequate parking and facilitate vehicular and pedestrian safety.
 - 1.5 Transportation demand management programs and other methods to reduce vehicle trips.
 - 1.6 A general emphasis on promoting alternatives to reliance on automobile use.
- Policy/Action 2. Cooperatively develop a regionwide, public transportation system that interlinks Eagle, Grand, Park, and Lake Counties to the rest of Summit County.
- Policy/Action 3. Encourage CDOT to continue to develop strategies that minimize risks associated with transport of hazardous materials on area highways.
- Policy/Action 4. Work cooperatively with CDOT to conduct and evaluate traffic counts at appropriate intervals to determine if improvements are needed because of changing conditions.
- Goal B. Promote and develop mass transit programs that are consistent with community values and the rural mountain character.
- Policy/Action 1. Work to increase effectiveness of transit service for residents, employees, and visitors.
- Policy/Action 2. Allow for the location of transit centers in appropriate locations to serve various forms of mass transit.
- Policy/Action 3. Encourage improved coordination between different transit providers to more efficiently provide transit service and to, where appropriate, promote uniformity between services provided.

- Policy/Action 4. Collaborate with the Summit School District to explore potential for use of school facilities (e.g., parking lots, maintenance, and buses during off-hour periods).
- Policy/Action 5. Explore creative marketing techniques that make the use of mass transit appear more appealing to potential riders.
- Policy/Action 6. Work with CDOT and other appropriate entities to develop long-term solutions to I-70 traffic, including the promotion of mass transit solutions such as fixed guideways.

Goal C. Promote programs that minimize vehicle trips.

- Policy/Action 1. Provide incentives and assist major employers to implement transportation demand management strategies intended to reduce overall vehicle use by employees. Examples of these strategies include:
 - 1.1 Flexible work hours to reduce traffic during congested times of day.
 - 1.2 Ride-matching services to encourage car-pooling.
 - 1.3 Vanpools.
- Policy/Action 2. Work with the ski resorts to provide incentives to encourage more day skier carpooling and arrivals and departures during non-peak traffic periods.
- Policy/Action 3. Where new lanes are proposed, the use of high occupancy vehicle lanes should be considered.
- Goal D. Ensure that new roads and roadway improvements maintain safe and efficient traffic flow and maintain neighborhood character.
- Policy/Action 1. Basin master plans should identify appropriate arterial and collector roadways and include recommendations on improving, funding, and maintaining these roadways.
 - 1.1 When identifying arterial and collector roadways, consider the community interest in providing efficient traffic flow and potential impacts to neighborhood character.
- Policy/Action 2. Provide adequate funding for roadway capital improvements and maintenance to ensure that safety on roads in the County is maintained or enhanced.
- Policy/Action 3. Review and if necessary amend County road and bridge standards to provide flexibility for maintaining the rural landscape (e.g, limiting road cuts and other visible landscape scars), while still providing for adequate roadway safety and maintenance.
 - 3.1 Future construction or reconstruction of bridges and culverts should be designed (e.g., width and height) with consideration for limiting floodplain impacts and allowing for wildlife movement.

- Policy/Action 4. Incorporate bike shoulders into new roadways and road upgrade projects for roads that provide critical links to bike path networks and for arterial and collector roads, except when a separated grade bikepath link is already provided.
- Policy/Action 5. A funding mechanism (e.g., highway impact fee) should be established to pay for major improvements to collector and arterial roadways to maintain acceptable traffic flows, with new development paying a proportionate share of the incremental costs caused by the development.
- Policy/Action 6. Amend the Development Code to require that new developments make or contribute to necessary off-site transportation improvements needed as a result of the development.
- Policy/Action 7. Encourage connectivity between adjoining neighborhoods and community facilities and services by connecting local and collector streets, where appropriate, and minimizing the use of cul-de-sacs.

Goal E. Aggressively promote alternatives to automobile usage.

- Policy/Action 1. Encourage and support higher density, mixed use pedestrian-oriented development projects in appropriate urban areas within walking distance of public transit, when consistent with basin master plans.
- Policy/Action 2. Require that new subdivisions and multi-family residential site plans include pedestrian access to on-site transit stops or connections to adjacent transit stops and, where applicable, adjacent commercial areas.
 - 2.1 Ensure that new developments are designed to encourage pedestrian use and that obstacles to pedestrian passage are not created.
 - 2.2 As maintenance, utility work, and reconstruction/redevelopment projects are initiated, pedestrian paths should be constructed where feasible to provide for pedestrian needs.
- Policy/Action 3. Pursue the development of new pedestrian paths in existing residential neighborhoods, where needed to access transit, adjacent commercial areas, and to tie into the county path network.
- Policy/Action 4. Seek opportunities to improve pedestrian access in existing developments and to eliminate obstacles to pedestrian movement.
- Policy/Action 5. Consider narrowing the width requirements of roadways to facilitate use of sidewalks.
- Policy/Action 6. Support innovative methods of promoting alternative transportation (e.g., fixed guideways along I-70).

Sustainability Measures

This element emphasizes the promotion of alternatives to automobile use. As such, the increase in transit use can help measure the effectiveness of the strategies outlined in this element.

Table 1. Summit Stage Ridership				
Year	Riders	Ridership % Change ¹		
1993	569,537			
1994	759,365	+33.3		
1995	820,397	+8.0		
1996	934,177	+13.8		
1997	1,008,550	+7.9		
1998	1,344,274	+33.3		
1999	1,362,985	+1.2		
2000	1,500,686	+10.1		
2001	1,514,662	+0.9		
2002	1,409,714	-7.0		
2003				
Etc.				

Overall ridership change of 146% increase for the period 1993-2002 compares to an overall population increase of 75% for the same time period.

Source: Summit Stage.

Table 2. Average Daily Traffic on Major County Highways ¹				
Location	Average Daily Traffic 1995	Average Daily Traffic 1998	Average Daily Traffic 2002	Average Daily Traffic Subsequent Years
I-70 east of Silverthorne	23,200	26,300	29,178	
I-70 between Frisco and				
Silverthorne	28,600	36,600	39,867	
I-70 between Copper Mt.				
and Frisco	21,800	24,200	23,277	
Hwy 91 at Copper Mt.	5,750	8,200	8,046	
Hwy 9 in Frisco	14,800	19,150	22,622	
Hwy 9 in Silverthorne	22,100	27,400	29,470	
Hwy 6 in Dillon	19,200	20,800	21,271	
Hwy 6 east of Keystone to Loveland Pass	1,200	1,650	1,158	

¹ Source: Colorado Department of Transportation Annual Average Daily Traffic Counts, 2002; I-70 Mountain Corridor Programmatic EIS, 1995 and 1998 data.

Implementation Strategies

Many of the policies and actions identified in this element propose some future work, such as an amendment to the Land Use and Development Code, in order to see their successful implementation. The table below identifies specific strategies recommended to fully implement the Transportation Element. Priorities are identified to give an indication of the current relative importance of a particular implementation strategy. These priorities are provided as guidelines only.

The emphasis of the following implementation strategies is the development of a Countywide Transportation Plan. Should support and funding for a comprehensive transportation plan not materialize, it is recommended that each of the bulleted items listed under the Project/Description column be treated as a separate implementation strategy.

	Table 3. Transportation Implementation Strategies			
Goal, Policy/Action	Project/Description	Timeframe	Priority	
A.1, A.2, B.1, B.3, B.4, B.5, C.1, C.2, D.2, D.3, D.4, D.5, E.1-E.4	Bring together the County, towns, resorts, CDOT, and other appropriate parties to define the scope and work program for a Countywide Transportation Plan. Once defined and agreed to, form appropriate committees/working groups to develop the plan. The plan should focus on a comprehensive countywide evaluation of transportation and future needs/solutions. The plan should also evaluate the bigger regional transportation picture and look at appropriate public transportation links with adjacent counties and the Front Range. The plan should look at necessary future road and parking improvements, but should also have a major focus on promoting alternative transportation modes, such as transit, carpools, bike, and pedestrian use. Specific issues that at a minimum should be addressed are listed below.	2-3 years	High	
	• The transit emphasis of the plan should focus on providing for more efficient transit service, marketing of service, and greater coordination and uniformity between the different transit providers in the County, including Summit Stage, the towns, the resorts, and the Summit School District. The use of alternate fuels in transit vehicles should be evaluated and, where appropriate, implemented.			
	• Transportation demand management programs should be encouraged to be provided by major employers. In conjunction with these programs, joint efforts between the County, towns, and resorts should be undertaken to encourage more carpooling and other strategies that reduce the impacts of day skier trips from the Front Range on the local transportation and parking system.			
	• Identification of needed road improvements and determination of acceptable levels of service for area roadways. Future road improvements should be evaluated with the emphasis on accommodating bike and pedestrian uses (e.g., bike shoulders along major roadways and sidewalks in appropriate locations).			

Table 3. Transportation Implementation Strategies			
Goal, Policy/Action	Project/Description	Timeframe	Priority
	The establishment of a funding mechanism for major roadway improvements in each basin, with individual development projects contributing to the fund, should be evaluated and, if appropriate, implemented.		
	 Promote a pedestrian and bike-friendly emphasis for new and existing developments, with the intent of constructing and improving pedestrian access to transit stops and improving the overall pedestrian and bike network to facilitate walking to commercial areas and other major destinations. As part of this effort, new pedestrian path/sidewalk construction should be identified where needed in existing neighborhoods to promote pedestrian safety and transit access. 		
	• Identify and aggressively pursue funding opportunities (e.g., state and federal grant programs) to support the development of a countywide transportation plan and the various transportation programs described above.		
D.7	As part of future roadway planning or reconstruction, the County should ensure that roads are designed with the goal of increasing connectivity between local and collector streets and limiting the use of culde-sacs.	Ongoing	Medium

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